High cardiovascular risk in Belgian workers: prevalence across economic sectors

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Introduction: Cardiovascular disease (CVD) remains the leading cause of mortality and morbidity in Europe. Addressing the modifiable health factors and health behaviours that are associated with CVD is needed to keep workers at work longer and healthier. The aim of this study was to assess the prevalence of high cardiovascular risk in Belgian workers and its relationship with demographic characteristics and economic sectors.

Methods: A cross-sectional study was conducted on data from 132,199 workers under medical surveillance of group IDEWE, External Service for Prevention and Protection at work in 2016. 55.2% were male, mean age was 38 years. Four cardiovascular health metrics (smoking, body mass index, physical activity and blood pressure) were categorized as "ideal", "intermediate" or "poor" according to the American Heart Association (AHA) criteria. A "high cardiovascular risk" group was defined as those workers meeting 3 or 4 "poor" cardiovascular health metrics.

Results: Overall 7% of workers met 3 or 4 "poor" cardiovascular health metrics and were labelled high cardiovascular risk, 9.2% of men and 4.3% of women. The prevalence of high cardiovascular risk increased with age from 3.5% in the age group under 25 years to 10.1% in those 55 years or older. Transportation and Construction had the highest prevalence of high cardiovascular risk, 17.3% and 12.4% respectively. The lowest prevalence, 3.4%, was observed in Education. The differences remained statistically significant after adjustment for age and gender.

Conclusion: A considerable number of workers are at risk for CVD. Significant differences exist between sectors. Risk factors for CVD are modifiable and the benefits of investing in workplace health promotion are clear. Especially workers in Transportation and Construction could benefit from customized worksite wellness programs. Additional research is needed about the relationship between occupation and cardiovascular risk factors and cardiovascular health.